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John Updell
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FREE THOUGHTS
UPON THE
BRUTE-CREATION:
OR, AN
EXAMINATION
OF
Father *BOUGEANT*'s
Philosophical Amusement, &c

(Price One Shilling.)

*BOOKS lately printed for R. MINORS, in
St. Clement's Church-yard.*

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5. A Commentary upon the Second *Psalms*.



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FREE THOUGHTS
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OR, AN
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Father *BOUGEANT*'s
Philosophical Amusement, &c.

In Two LETTERS to a LADY.

Job xii. 7, 8, 9, 10. *But ask now the beasts, and they shall teach thee; and the fowls of the air, and they shall tell thee.*

Or speak to the earth, and it shall teach thee; and the fishes of the sea shall declare unto thee.

Who knoweth not in all these, that the hand of the Lord hath wrought this?

In whose hand is the soul of every living thing, and the breath (spirit) of all mankind.

By *JOHN HILDROP*, M. A.
Rector of *Wath*, near *Rippon* in *Yorkshire*:
And Chaplain to the Right Honourable *Charles*
Earl of Ailesbury and Elgin.

L O N D O N :

Printed for *R. MINORS*, Bookseller and Stationer,
in *St. Clement's Church-yard*, M.DCC.XLII.





FREE THOUGHTS
UPON THE
BRUTE-CREATION:

O R,

AN EXAMINATION of Father
*BOUGEANT's Philosophical
Amusement, &c.*

MADAM,

I DARE say you have made many a merry Reflection upon the good Company and Conversation we lately enjoyed at *B—ton*: for my own part, I can never think of it without laughing. Methinks I hear my little Doctor pouring forth all his Rhetoric and Logic upon an abstruse Question, which I was sure he had not Capacity enough to understand. I see, and hear, and admire his modest Assurance, incapable of Contradiction, affirming without Proof, and concluding without Premises, that *all the Animal Functions and Operations*
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of the *Brute-Creation* (which different Philosophers had ascribed to different Causes, such as Mechanism, Instinct, Substantial Forms, &c.) were entirely owing to the Operation of evil Spirits, who are the moving Principle in every one of them. As this Thought was quite new to me, and perfectly opposite to all the Sentiments I had ever entertained upon that Question, I could not for my life imagine, where he had pick'd up this new Philosophy, which had almost frightened some of the Company out of their Senses.—I shall never forget the puzzled afflicted Face of the honest Justice, who, tho' a very good Protestant, and in all other respects of blameless Life and Conversation, had spent so many Years in following a *Pack of Devils*, which he had innocently mistaken for a Pack of harmless Beagles.—But the whimsical Distresses of the poor Ladies, gave me no small Diversion. Sweet Miss *Jenny*, who has lavish'd away more Kisses upon her favourite Cat, than she would bestow upon the best Man in the Parish, felt some compunction within herself, that she had been wantonly, and almost maliciously, throwing away those Caresses upon an evil Spirit, which many a good Christian would have been glad of. Dear Miss *Harriot* had the same regret for her beloved Monkey, and poor *Dolly* for her Parrot ; and resolved, one-and-all, never to hold commerce or correspondence with evil Spirits for the future, in whatever amiable Shape or Figure they might appear ; which, I apprehended, could end in nothing less

less than an intire destruction of all the favourite Domesticks of the Family ; whilst you, with a chearful compofure of Mind and Countenance, infeparable from good Nature and good Sense, fat fmiling at the empty Harangue of the Oration, and the fantastical Sufferings of the Audience.

Well ! home I went, full of this absurd, unphilosophical Scheme, wondering how my learned Friend, who, with very moderate Talents, affects to be thought a very great Scholar, and profound Philosopher, could ever fall into this uncommon way of thinking. But as I chanced a few days after to strole into a Bookseller's Shop, I spyed a little Pamphlet lying upon the Counter, entitled, *A Philosophical Amusement, concerning the Language of Birds and Beasts. Written originally in French by Father Bougeant, a learned Jesuit, &c.* I quickly perceived where my learned Friend had pick'd up his new Philosophy, from what Fountain all this profound Erudition was drawn. The honest Man has a very preposterous Ambition to be famous ; and as he is conscious that he has no chance to attain any degree of Distinction from the proper and regular use of his intellectual Faculties, he therefore attempts a nearer cut to Fame, by engaging the Attention of the Unlearned to something that has a new and marvellous Appearance : This has given him an itch after Novelty, and an affection for uncommon Notions, more than common Sense. No wonder, therefore, he was immediately struck

with this surprizing Sentiment, which he resolved to put off at the next Tea-table for his own, assuring himself, that neither the Ladies, nor myself, (whose Obscurity he heartily despises) should ever find him out, but admire him for a most profound Philosopher. I took my Pamphlet home with me, and read it over and over, with the greatest Care and Candour ; and upon the whole must needs say, that I should never have suspected the Author (if he had not told us so himself) to be a *Jesuit*, much less a *Famous Jesuit*. He has done no credit to his Order ; the Gentlemen of that Society owe him but little Thanks ; they generally acquit themselves much better upon any Subject they undertake. He has treated a noble Subject loosely and superficially, to say no worse ; for I might add, idly and profanely ; and had I been his proper Superiour, I should have changed his Confinement at *La Fleche*, for a more proper Habitation at *Moorfields*.

But this (say you) is libelling without Proof, condemning at random : Let us come to Particulars ; make good your Charge, shew us, if you can, the Defects of his Scheme, and try if you can strike us out a better.

With all my heart, Madam. But before I proceed to a more particular Examination of his Scheme, I must freely acknowledge, that there are a great many just and sprightly things scattered up and down through his whole Performance ; but favouring more of the vivacity of the *Frenchman*, than the piety and solidity of a Christian

stian Philosopher. He justly and smartly ridicules the unintelligible trumpery of Mechanism, Instinct, Substantial Forms, and what not of the *Aristotelian* and *Cartesian* Philosophy, which, like occult qualities, are hard Words without a Meaning, intended only as a thin disguise for Ignorance and Affectation : But what has he advanced in the room of them ? Why, something equally absurd, but not equally innocent ; something shocking to a Philosopher, and offensive to a Christian, in direct contradiction to Reason and Revelation, as I shall endeavour to make appear. Nor is he less offensive in point of Delicacy, his Ideas and Sentiments are often so low, his Images so indecent, his Expressions so coarse, as could hardly be expected from a polite *Frenchman*, and an Ecclesiastic to a fine Lady, whom, at the same time, he seems to consider as a Person of Discernment and Distinction. Let us now follow him his own way. His first Chapter is

Of the Understanding of Brutes.

He begins with this Question ; *Have Brutes any Understanding ? I am convinced* (says he) *that you will not so much as hesitate upon this Question :* farley presuming she would answer in the Affirmative, and as I dare venture to affirm that his fair Correspondent had not a better Understanding than mine, I will venture to presume the same for you. *An Understanding* they certainly have of such a kind or degree, at least as is sufficient for their state and rank in the
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universal System, and the several duties and offices for which they were intended by their Creator. Less than this I think cannot be said, and who presumes to say more ? Though I have known many an honest Fellow that made a good figure in his Neighbourhood, who yet has hardly discovered more Reason, a better Understanding, or half so much Virtue as the Beast he rode on. Take any Man of a plain, natural good Understanding without the prejudices of Philosophy, and propose the same Question to him : I dare say he would stare at you, and think you were bantering him ; or if he thought you were in earnest, he would not so much as demur upon it. In short, however we may affect to puzzle ourselves or others with learned Objections proceeding from downright Ignorance, we allow it, we presume upon it, as a first Principle, we reason upon it, and act agreeably, as we make it an unerring Rule to direct us in the Treatment and Management of our domestick Animals ; this it is that guides us in the education of our Dogs and Horses, to train them up by Correction and Discipline to the several Offices for which they are intended, and the Services which we expect to receive from them. This it is that directs us to caress and reward them when they do well, and to correct and punish them, when they are vicious and disobedient. Did we consider them as meer Machines, as Creatures that had no Sense, Understanding, or Reflection ; this Conduct would be as absurd and ridiculous, as it would be to
carefs

caress and reward your Clock or your Watch for going well, or correct and punish them with a Whip or Cudgel for going wrong. On the other hand, we discover in Brutes plain and evident marks of Sense and Understanding. They are sensible what we do to them, and what they do to us. When for instance I see a Dog hastening to me when I call him, caress me when I stroke him, tremble when I rate him, run away from me when I beat him : nay, further, when I see him reflecting and reasoning upon my Conduct towards him, I must conclude he is acted by some higher Principle than meer Mechanism. Be pleased, Madam, to try this Experiment with your beloved *Veny*, (though upon second Thoughts he has been too much and too long a Favourite to apprehend any danger from your Hands,) or call any other Dog of the Family, whose Hunger may make him leap at a good Morfel, shew him a Piece of Meat in your Left Hand, and hide your Right Hand behind you, and see how he will behave ; especially, if he knows he has been guilty of a Fault, or been rated or punished for some Misdemeanour. He will either not come near you at all, unless urged by the violence of his Hunger, or approach you with the utmost Diffidence and Caution : for thus I hear him reasoning with himself ; *Surely, this is not the Hand that used to feed me, and why is that other Hand hid from me ? That Hand, from which I have received many a sore Stripe, when I have offended, has now, I fear, some secret Vengeance, some Whip, or*
Cudgel

Cudgel in store for me, if I get within the reach of it ; I will therefore prefer the Dog's Portion of Hunger and Ease, before Lashes and Stripes, and broken Bones. Ay ! and he is much in the right, he reasons well, and discovers more Sense and better Logic than many a stupid Puppy with two Legs, who lives at random, who pursues every appearance of Pleasure, gratifies every Appetite, submits to every demand of Lust or Fancy, without Thought or Reflection, and rushes with his Eyes open into certain Diseases, Beggary and Damnation. Now then if the Senses and Perceptions of Brutes be so quick and lively, if from those Perceptions they never fail to draw just and rational Conclusions, and to make a practical Use of them for the preventing Pain, or procuring Pleasure, if by the different Motions and Gestures of their Bodies, or Sound of their Voice, they express their different Sentiments of Joy and Sadness, of Pain or Pleasure, of Fear and Desire, of Love or Hatred ; I cannot help concluding from thence, that they have in them some Principle of Knowledge and Sentiment, be it what it will. Now, were all the Philosophers in the world to assert and maintain the *Cartesian* Opinion of their being Machines, there is some strong inward Conviction in every sensible unprejudiced Mind that gives them the lye, tho' we were not able to confute their Assertion, nor defend our own ; and surely nothing but the Vanity of a *Frenchman* could ever expect that so absurd a Scheme could pass upon a learned World for sound Reason and true Philosophy.

For my own part, I could as soon expect to see Gallantries between a couple of amorous Clocks or Watches, or a Battle betwixt two quarrelsome Windmills.

The Notion of *Instinct*, though not so palpably absurd, is equally obscure, unnecessary, and useless for all the great ends and purposes which it is intended to serve. They who use it, do not pretend to define it, to shew us its real Nature, or wherein it consists, they seem only to speak of it as a blind Impetus, and unknown Impulse; a kind of Mechanical Necessity, by which we are in a manner compelled to perform such and such Actions, without being able to know or explain the Reasons for so doing. By this, they pretend to account for many wonderful Operations and Effects in the almost infinite Variety of Species through the Brute-Creation, such as, for instance, all sorts of Birds building their Nests in exact uniformity of Model and with the same Materials, all the various Methods of Cure that both Birds and Beasts have recourse to when they are any ways indisposed or wounded; this it is, they say, that teaches the Sparrows to purge themselves with Spiders and other Insects; this teaches Birds to swallow Gravel to facilitate their Digestion; this teaches the Dog with a surfeited Stomach to run to a particular kind of Grass to procure a Vomit; to this we owe all the excellent and wonderful Operations to be found among Beasts and Birds, Reptiles and Insects; many of which seem to exceed the

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highest Improvements of human Reason and Invention. But why must all this be owing to Instinct? Since we cannot refuse them a knowing Faculty, why should we give them a needless Instinct? These wonderful Operations may be, for ought we know, the simple Effects of their Understanding : and since it is solely in consequence of a knowing Faculty, that Man performs the same Operations, why should not the same Principle also rule in the Brutes? And where would be the Heresy of believing or affirming, that those Actions which Brutes are supposed to perform by meer Instinct, are performed in consequence of their Understandings, with Understanding and Reason? Is such a thing impossible? Does either Reason or Revelation forbid it? Are they not equally possible to their Omnipotent Creator? And can any reasonable Doubt be made, whether they were not endued with every Perfection that their Rank in the Scale of Beings required? And would it not be a great Imperfection to want the means of knowing and procuring whatever was requisite in the common Order of Nature, for the Preservation of the Individuals and the Propagation of the Species? And since it cannot be denied that every Species of Beings have that power, I see nothing absurd or unphilosophical in supposing, that the All-wise and Omnipotent Author of Nature has given each of them such Faculties as are proportionable to their Wants and Capacities, and the part they fill in the universal System. Is there either Absurdity or Heresy in supposing, that the
same

same infinite Power that could form the Body of the most minute Insect, with such exquisite Proportion and Beauty, could at the same time, with the same ease, provide a proper Inhabitant to animate and govern it, and answer all the purposes of its Creation? He that can think otherwise, must have been either a very ignorant or a very indolent Observer of Nature. The Scriptures directly call this Knowledge by the name of *Wisdom*, Prov. xxx. 24. *There be four Things that are little upon Earth, but they are exceeding wise. The Ants are a People not strong, yet they prepare their Meat in the Summer. The Conies are but a feeble Folk, yet they make their Houses in the Rocks. The Locusts have no King, yet go they forth all of them by Bands. The Spider taketh hold with her Hands, and is in King's Palaces.* Holy Job supposes the same thing, that the whole Brute-Creation act by Wisdom and Understanding, of such a Kind and Degree as is proper for their State and Condition in the Scale of Beings. Thus Ch. xxxix. 13, 14, 15, 16, 17. speaking of the *Ostrich*, he observes, that *she leaves her Eggs in the Earth, and warms them in the Dust, and forgets that the Foot may crush them, or that the wild Beast may break them. She is hardened against her young ones, as though they were not hers, her labour is in vain without fear, because God hath deprived her of Wisdom, neither hath he imparted to her Understanding.* The Fact is asserted by all Travellers, that the *Ostrich* leaves her Eggs in the Sand to be hatch'd by

the Sun, which unnatural disregard for her Offspring is so remarkable, that when they see a Mother who has little Tenderness for her Children, they compare her to an Ostrich; to which the Prophet *Jeremiah* alludes in his Book of *Lamentations*, ch. iv. 3. *The Daughter of my People is become cruel, like the Ostriches in the Wilderness.* In short, the Ostrich is allowed, on all hands, to be a very stupid foolish Bird, destitute of that Prudence and Caution which are visible in every other Family of Insects, Birds, and Beasts; for it is particularly observed in her, that when she is pursued by the Hunters, she runs to hide her Head, and particularly her Eyes behind a Tree, all the rest of her large Body is exposed to view; but as she no longer sees the Hunter, she wisely imagines he does not see her, and that therefore she has no danger to apprehend. Now this whole absurd and ridiculous Conduct, the inspired Writer ascribes to her want of that *Wisdom, Understanding* and *common Sense*, which are to be found in every other Species of Beings, for the Production and Preservation of their several Families. *Because God hath deprived her of Wisdom, neither hath he imparted to her Understanding*, v. 17. Were we now to extend our Enquiries to the Polity, Architecture, and Oeconomy of Bees and Wasps, and all the other Tribes and Families of Insects, we should find them in many respects excellent Monitors to the Bulk of Mankind.

“ * The Beehive, for instance, is a School to
 “ which

* Spectacle de la Nature, *Dial.* 7. p. 135.

“ which numbers of People ought to be sent.
 “ Prudence, Industry, and Benevolence, pub-
 “ lick Spirit, and Diligence, Oeconomy, Neat-
 “ ness, and Temperance, are not only practised
 “ by them in the most exemplary manner, but
 “ strongly recommended to us by their Ex-
 “ ample. Look on a Swarm of Bees, and ob-
 “ serve the Disposition that influences every In-
 “ dividual ; they all labour for the general Ad-
 “ vantage ; they are all submissive to the Laws
 “ and Regulations of the Community ; there
 “ is no particular Interest, and consequently
 “ no Emulations nor Competitions for Gain or
 “ Glory ; no Distinctions, but those which Na-
 “ ture and the Necessities of the Family have
 “ introduced among them. We never see them
 “ dissatisfied with their Condition, or inclinable
 “ to abandon the Hive, in Disgust to find them-
 “ selves Slaves or Necessitous. On the contrary,
 “ they think themselves in perfect Freedom,
 “ and perfect Affluence, as indeed they are :
 “ they are free, because they depend only upon
 “ the Laws ; they are happy, because the Con-
 “ course of their several Labours inevitably pro-
 “ duce an Abundance, that constitutes the Riches
 “ of each Individual. Let us compare Human
 “ Societies with this, and they will appear al-
 “ together monstrous. Necessity, Reason, and
 “ Philosophy, have established them under the
 “ commendable Pretence of mutual Aids and
 “ Benefits ; but a Spirit of Selfishness destroys
 “ all ; and one half of Mankind, to load them-
 “ selves with Superfluities, leave the other half

“ destitute of the common Necessaries of Life.” In short, upon the strictest and closest Enquiry we can make into the several Tribes of Families of the Brute-Creation, it will appear, that they are all directed and act by some Principle analogous at least, and equivalent to what we call Understanding in ourselves ; and why we should call it by any other Name in them, I confess I am at a loss to determine. If then the several Species of Brutes do by the Strength of their own Understandings, think, reason, project, contrive, and perform every Office within their proper Sphere of Life and Action in a just and due proportion to what we do in ours, they must be allowed to have some immaterial Principle within them, in which these Faculties are inherent, and by which they are directed. Now, to my poor Apprehension, Understanding without a Soul, and a Soul that is not a Spirit, appears quite as absurd as Light without Flame, or Flame without Fire ; the one I think naturally supposes and includes the other.

The Great Mr. Locke, in his Essay on Human Understanding, lib. 2. cap. 11. allows that Brutes have Ideas, and that they reason, tho’ they are not capable of comparing and comprehending these Ideas, and reasoning abstractedly, as we do. Yet (says he) if they have any Ideas at all, and are not mere Machines, as some would have them, we can’t deny them to have some Reason. It seems to me as evident, that they do in some instances reason, as that they have Sense ; but it is only in particular

ticular Ideas, just as they received them from their Senses.—Just as they received them from their Senses!—Why, how should it be else? What is the Foundation of our Reason, but those particular Ideas we receive from our Senses? Ideas are Images, excited or impressed upon the Soul by external Objects, thro' the Mediation of the Senses; and the enlarging, comparing, and combining these Ideas, and forming practical Conclusions from them, is the whole Province of Human Reason. This philosophical Limitation of the Understanding of Brutes, sounds a little awkwardly from this great Man, because he has allowed the most exalted Human Understanding no better Materials to work upon. He has very justly exploded the Notion of innate Ideas, and has by consequence left us nothing but those which we receive by Sensation, to be the Ground-work of our most refined Speculations. Why then will he not allow the same uniform Effect to be produced by the same uniform Cause in both? Why does he take so much pains to persuade himself and us, that Rationality in Brutes must proceed from a quite different Cause, from what it does in ourselves? What is he afraid of? What would be the terrible Consequences of such a Concession? For my own part, I think I see none, but what your own excellent Understanding will, with a little Recollection, easily evade, without the least violence either to Reason or Revelation. He concedes, indeed, to the main Point, and allows the Rationality of
 Brutes ;

Brutes ; but, for fear of allowing them immaterial, and consequently immortal Souls, he frequently insinuates, that Thought, Rationality, or Reflection, is not the absolute Privilege of immaterial Beings, but may be communicated by the Power of God to certain Portions of Matter, differently modified, and consequently that Matter exalted to a certain degree of Purity, may be as capable of Reason and Reflection, as an immaterial Spirit. And in his Dispute with the Bishop of *Worcester*, who justly charged him with this unphilosophical Notion, he was reduced to a necessity of asserting it in plain and express Terms, and of putting all his Philosophy to the utmost stretch, to reconcile it to Reason and common Sense ; which, I humbly conceive, is absolutely impossible. Yet he frequently and directly asserts the Possibility of Thinking Matter, allowing to his material Animal Sense, Perception, Reason, spontaneous Motion or Volition, which, one would imagine, that nothing but Vanity, an Itch of Singularity, or a Desire of Victory, could ever have extorted from so great and excellent a Person : and I cannot pass it by without some little Examination, for which I shall offer at no Apology to a Lady of your inquisitive Genius, and superior Understanding, directed solely by Reason and the Nature of Things, without the Prejudices of vulgar Errors, or the Subtilties of Philosophy, falsely so called.

The most obvious Idea we have of Matter, is *of an extended impenetrable, solid Substance, incapable of moving itself, or of being moved, but by*

by the Agency and Impression of some superior, external, active Cause; from whence it will unavoidably follow, that mere Matter, however modified, exalted, or purified, will be as incapable of Self-motion, as it was in its lowest state of Density, or Depression; and consequently cannot, by any Power, be transmuted, or sublimated into a living, self-moving Substance; from whence it follows, that all Gravity, Attraction, Elasticity, Repulsion, and whatever Tendencies to Motion are observed in Matter, and commonly called natural Powers of Matter, are not Powers implanted in Matter, or possible to be made inherent in it; but are intirely owing to some Impulse, or Force impressed upon it from external Causes. And the most that can be said, is, that Matter is indeed susceptible of Motion, or capable of being moved, but that the Motion itself must proceed from some external Cause, totally distinct from, and superior to Matter. Mr. Locke, therefore, had very little Reason to be so peremptory in his Dispute with the Bishop of Worcester, about the Possibility of Thinking Matter; where, to prove it possible, he says, Vol. 2. p. 144. Edit. 1715. *for example, God creates an extended solid Substance, without superadding any thing else to it, and so we may consider it at rest; to some parts of it he superadds Motion, but it has still the Essence of Matter. Other parts of it he forms into Plants, with all the Excellencies of Vegetation, Life, and Beauty, which is to be found in a Rose or a Peach-tree, above the Essence of Matter in general, but it is*

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still.

*still but Matter: To other parts he adds Sense, or spontaneous Motion, and those other Properties that are to be found in an Elephant. Hitherto it is not doubted but the Power of God may go; but if we venture to go one Step further, and say, God may give to Matter Thought, Reason, and Volition, as well as Sense and spontaneous Motion, there are Men ready to limit the Power of the Omnipotent Creator, and tell us he cannot do it; because it destroys the Essence, or changes the essential Properties of Matter, &c. Well! and a very good Reason it would certainly be; for Omnipotence itself cannot produce Impossibilities, cannot effect Contradictions, cannot make the same Thing to be, and not to be, at the same time; cannot make a Substance, which, as solidly extended, must resist all Change of State, become (while it continues unactive and dead) Life, Sense, and spontaneous Motion; for that is directly affirming, that the same Portion of Matter, which is unactive, dull, and dead, may be at the same time living, sensible, and spontaneously moving. To say the truth, his Zeal to support his Argument, and confound his Adversary, has thrown him into such Inconsistencies of Thought and Expression, as could never have proceeded from cool and sober Reason. For Instance, where he says above, *To some parts of Matter, God superadds Motion, but it has still the Essence of Matter.* What does he mean by saying, *It has still the Essence of Matter?* Does he mean, that Motion has the Essence of Matter, or is essential to it, or a Mode of*

of it: Neither of these could be his Meaning; he could only mean, that that Portion of Matter to which Motion is superadded, has still the Essence of Matter. Who doubts it? And therefore is intirely distinct from the Motion superadded, which is really and truly nothing less than an Emanation or Impression from the Original and Eternal Fountain of Life and Power; and, consequently, intirely distinct from Matter. If Solidity, Inactivity, and Resistance, be the essential Properties of Matter, it will unavoidably follow, that all those Effects commonly ascribed to certain natural Powers residing in Matter, are immediately produced by the Power of an immaterial Being, who first created this dead Substance Matter, originally impressed, and still continues to impress Motion upon it. Now whatsoever begins Motion where it was not, and stops it where it was, that effects a Change from Rest to Motion, and from Motion to Rest, and that arbitrarily, can never be Matter, whose essential Property it is necessarily to resist all change of its State, either of Rest or Motion. I therefore conclude, that whatever Principle or Being can arbitrarily effect a Change of the present State of Rest or Motion, in that Portion of Matter which composes the Body of any Animal, cannot be the Matter of the Body itself, which necessarily resists or opposes all change of its present State, and therefore must be concluded to be an active, immaterial, and spiritual Substance, which, without any violence to Philosophy, we may venture to call a Soul. Pardon

me, Madam, for leading you into this intricate dry Speculation; my Subject led me into it, and requir'd some little Examination in this place. Some further Considerations upon this Subject, and the Reverend Father's devilish Contrivance to account for all animal Functions and Operations, without allowing them to have Souls, we shall defer to a more proper Place, and proceed to the next Head of Inquiry.

II. *Of the Necessity of a Language between Brutes.*

By Language we are not only to understand a Sequel of articulate Sounds, by which Men have agreed to express their Ideas and Sentiments to each other, but any sort or kind of inarticulate Sounds, Gestures, or Motions, by which, in the several Tribes and Families of the Brute-Creation, the Individuals communicate their Sentiments, their Wants, their Desires to each other; and these are, no doubt, as different as the Species themselves, and as expressive and significant to them as our most articulate Sounds can be to us. Of this there can be no manner of doubt, especially among those that live in society, as particularly Pigeons, Rooks, Swallows, and Storks among Birds; Bees and Ants among Insects; and particularly the Beavers among Beasts; and no doubt but there must be the same among Fishes, those especially which at certain Seasons remove in Shoals to different parts of their Element. All, and each of these, speak,

ſpeak, undoubtedly, a Language proper and peculiar to their Species, which are as expreſſive and intelligible to them, as our Language is to us ; and may, not improperly, be called the different Dialects of the Language of Nature.

Our Author, in the miſt of this Inquiry, has dropp'd an Expreſſion which I cannot underſtand, as having no apparent relation to his Subject, or any Connection with what goes before, or follows after. *Page 27*, He ſays, *Angels ſpeak to each other, yet have no Voice*. How bold, how crude, how unphiloſophical is this Expreſſion ? Have Angels a Voice to ſpeak to us, and none to ſpeak to one another ? Did he never read of the Converſation of Angels with the Patriarchs and Holy Men of the *Old Teſtament* ? Of the Angel *Gabriel* delivering a Meſſage from God to *Zacharias*, concerning the Birth of *John* the Baptiſt, *Luke i.* and another to the Bleſſed Virgin, concerning the Incarnation of our Lord Jeſus Chriſt ? Did he never read of *the Voice of the Archangel*, *1 Theſſ. iv. 16* ? If he only means, that they have not a Voice like us, articulated by the Organs of the Human Body, and different Modulacions of the Air ; who diſputes it ? But is this ſufficient to juſtify him in ſaying they have no Voice ? Does he allow a Voice, or ſomething equivalent to it, to the loweſt Orders of Brutes and Inſects, and will he allow none to the higheſt Orders of intellectual Beings ? How ſurprizing, how unaccountable is this ? Surely he had as mean an Opinion of the good Senſe of
the

the fine Lady to whom he was writing, as he had a good one of his own. But to return :

He observes, very justly, that we have a thousand ways of expressing our Passions, our Sentiments, our Hopes and Fears, our Desires and Wants, our Joys, or Sufferings, without the Mediation of Words. *When we are pleased* (says he, pag. 23.) *every thing in us speaks : Do we not continually speak by certain Looks, by a Motion of the Head, a Gesture, nay the least Sign in the World?* Ay! and when we are displeased or angry, we can as easily make ourselves understood by Looks and Gestures, as by the plainest and most expressive Language. How often have I seen those lovely Eyes of yours rebuking, with unutterable Eloquence, the assuming Coxcomb, and the malicious Prude, into Silence and good Manners? How many melting Addresses have you received from the Eyes of your languishing Admirers, who had neither Courage nor Merit enough to address themselves in any other Language? In short, languishing modest Lovers resemble a Nation or Society of dumb People, who are never at a loss for a Set of significant Looks, Motions, and Gestures, to supply the want of Words, and Defect of other Expressions; and which form a Language as expressive and intelligible to them, as the most articulate Language in the World can be to other People. Now can any one reasonably doubt, whether the Brute-Animals have the Power and Means of doing the same? It is, I think, undeniable, that they have all a knowing Faculty; but to what purpose

pose can we suppose the all-wise Author of Nature has given them this Faculty, but to enable them to provide for their Wants, their Preservation, and whatever is fit for their Condition, and suitable to the peculiar kind of Life he has appointed for them. Let us, moreover, consider that many Species of Birds, Beasts, and Insects are made to live in Society at large, and others to live in a kind of domestic Society, Male and Female cohabiting together, in a kind of Family, for the Education of their Young-ones. Now, do but consider what Use could the first Species make of their Understanding, for the Preservation and Welfare of their Society, and of course for their own peculiar Good, arising from the publick Prosperity, if the Members of that Society have not among themselves a common Language perfectly known to every one of them? What Use could they make of their Knowledge and Understanding, if they had not some Method of communicating their Knowledge, Advice, and Assistance, to each other? If they could not understand, or be understood by each other, they could neither give nor receive any Comfort, Assistance, or Help from Society, and without such a Communication it would be absolutely impossible for such a Society to subsist; in a word, no more Communication, no more Society.

For the better understanding the Necessity of this Communication, let us take a nearer View of those particular Families among the Beasts, Birds, and Insects, that seem most to want

and to use it, those I mean that live in Society. Among the Beasts, we will particularly consider the Beaver, who for his singular Sagacity, Patience, Industry, and Skill in Architecture, seems to excel all the quadruped Family. * “ The Beaver is a Creature particularly remarkable for the use made of his Skin, but most of all, for the Dexterity with which he builds his Habitation. The Beaver, whether Male or Female, has four Bags under his Intestines, impregnated with a resinous and liquid Substance, which when it is ejected settles into a thick Consistence, of which he makes a singular use in the building his Habitation. The Physicians call it *Castor*, and prescribe it as an excellent Remedy against Poisons, Vapours, and other Indispositions; when it grows old, it blackens and degenerates into a dangerous Poison. He is furnish’d with three very useful Implements for building, his Teeth, his Paws, and his Tail. His Teeth are strong and deeply riveted into his Jaws, with a long and crooked Root; with these he cuts, as well the Wood for his Building, as that which furnishes him with his Food. His fore Feet resemble those of such Animals as hold what they eat in their Paws, as Apes for instance, Rats, and Squirrels; with these Feet, he digs, softens, and works the Clay, which is extremely serviceable to him. His hind Feet are accommodated with Membranes, or large Skins
“ between

* Spectacle de la Nature, *Dial.* 12. p. 77.

“ between his Toes like those of Ducks, and
 “ other Water-Fowl. His Tail is long, a little
 “ flat, entirely covered with Scales, supplied
 “ with Muscles, and perpetually lubricated with
 “ Oil or Fat. This Animal, who is an Ar-
 “ chitect from his Nativity, uses his Tail in-
 “ stead of a Hod, for the Conveyance of his
 “ Clay or Mortar, and a Trowel to spread and
 “ form it into an incrustation ; the Scales pre-
 “ vent these Materials from penetrating the Tail
 “ with their Cold and Moisture ; but the Scales
 “ as well as the Tail would be injured by the
 “ Air and Water, if it were not for the pre-
 “ vention of an Oil, which he distributes all
 “ over them with his Snout ; and the four Bags
 “ I have mentioned, are undoubtedly the Ma-
 “ gazine of this Fluid.

“ The Beavers inhabit the same Mansion
 “ in great Numbers, unless violent Heats, or
 “ Inundations, the Pursuits of Hunters, Scar-
 “ city of Provisions, or an extraordinary Increase
 “ of their Offspring oblige them to sepa-
 “ rate. In order to fix their Settlement, they
 “ chuse a Situation that abounds with Provi-
 “ sions, and is wash'd by a Rivulet, where they
 “ may form a convenient Reservoir of Water
 “ for their Bagnio. They begin with Build-
 “ ing a Mole or Causey, in which the Water
 “ may rise to a level with the first Story of
 “ their Habitation. This Causey at the Foun-
 “ dation may contain ten or a dozen Feet in
 “ thickness : it descends in a slope on the Side
 “ next the Water, which in proportion to its

“ Elevation gravitates upon the Work, and
 “ presses it with a strong tendency towards the
 “ Earth. The opposite Side is raised perpen-
 “ dicular like our Walls, and the Slope, which
 “ at its Basis is twelve Foot broad, diminishes
 “ towards the top, whose breadth does not
 “ exceed two Feet. The Materials of this Work
 “ are Wood and Clay. The Beavers with ad-
 “ mirable facility cut the Pieces of Wood as
 “ thick as one’s Arm, others as large as one’s
 “ Thigh, and from two to four, five, or six
 “ Foot in length ; and sometimes more, in pro-
 “ portion to the Ascent of the slope : They drive
 “ the extremity of these very near each other
 “ into the Earth, and take care to interlace them
 “ with other Stakes more slender and supple.
 “ But as the Water without some prevention
 “ would glide through the Cavities, and leave
 “ the Reservoir dry, they have recourse to a
 “ Clay, which they presently know how to
 “ procure, and with it they close up all the
 “ Interstices both within and without ; and this
 “ entirely prevents all Evacuation ; they con-
 “ tinue to raise the Dyke proportionable to the
 “ Water’s Elevation and Plenty. They are like-
 “ wise very sensible, that their Materials are not
 “ so easily transported by Land as by Water,
 “ and therefore take the Opportunity of its
 “ increase to swim with Mortar placed on their
 “ Tails, and Stakes of Wood between their
 “ Teeth, to every Place where they have oc-
 “ casion for those Materials. If the Violence
 “ of the Water, or the Foot-steps of Hunters,
 “ who

“ who pass over their Work, damage it in any
 “ degree, they immediately repair the Fracture,
 “ visit all the Edifice, and with indefatigable
 “ Application refit and adjust whatever hap-
 “ pens to be disconcerted ; but when they are
 “ too frequently persecuted by the Hunters,
 “ they only work in the Night, or else discon-
 “ tinue their Labours.

“ When the Causey or Dyke is compleated,
 “ they begin to form their Cells, which are
 “ round or oval Apartments, divided into three
 “ Partitions, raised one above another ; the first is
 “ sunk below the level of the Dyke, and gene-
 “ rally full of Water ; the other two are formed
 “ above it. They raise this Structure in a very
 “ solid manner on the edge of their Causey,
 “ and always in Stories, that in case the Wa-
 “ ter should ascend, they may remove to a
 “ higher Situation ; if they find any little Island
 “ near the Reservoir, they fix the Dwelling
 “ there, which is then more solid, and they
 “ less incommoded with the Water, in which
 “ they are capable of continuing but a short
 “ time : but if they are not favoured with this
 “ Advantage, they drive Stakes into the Earth
 “ with their Teeth, to fortify the Building
 “ against the Winds and Water. At the bot-
 “ tom they strike out two Openings to the
 “ Stream ; one conducts them to the Place where
 “ they bathe, and which they always keep very
 “ decent ; the other is a Passage to that quar-
 “ ter, where they carry out every thing that
 “ would soil or rot the upper Apartments. There

“ is a third Aperture much higher, calculated
 “ to prevent their being shut up, when the
 “ Ice has closed the Openings into the lower
 “ Lodgments. They sometimes build their
 “ House intirely on the dry Land, and sink
 “ Ditches five or six Feet deep, in order to
 “ descend to the Water. They employ the same
 “ Materials and Industry in the Structure of their
 “ Dwelling, as they use for their Causey. The
 “ Walls of the Building are perpendicular, and
 “ two Feet thick. As their Teeth are more
 “ serviceable than Saws, they cut off all the Pro-
 “ jections from the Wood, that stand out beyond
 “ the Perpendicular of the Wall, after which
 “ they work up a mixture of Clay and dry Grass,
 “ into a kind of Mortar, with which, by the
 “ Aid of their Tails, they rough-cast the out
 “ and insides of the Work.

“ The Edifice is vaulted within like the
 “ handle of a Basket, and generally rises in an
 “ oval Figure. The Dimensions are propor-
 “ tioned to the number of the intended In-
 “ habitants. Twelve Feet in length, and ten
 “ in breadth are sufficient for eight or ten
 “ Beavers; if the number increases, they en-
 “ large the Place accordingly. It has been as-
 “ serted for a Truth, that there have been
 “ found above four hundred of these Creatures
 “ in different Lodgments communicating with
 “ one another. But these popular Societies are
 “ very rare, because they are too unmanage-
 “ able and tumultuous, and the Beavers are
 “ generally better acquainted with their own
 “ Interests.

“ Interests. They associate to the number of
 “ ten or a dozen, and sometimes a few more :
 “ they are a set of amicable and sagacious In-
 “ habitants, in whose mutual Society they may
 “ propose to spend the Winter together in a
 “ very agreeable manner ; they are gifted with
 “ a natural Arithmetick, which enables them to
 “ proportion the Place and Provisions to the
 “ Necessities of the Company ; and as it is cus-
 “ tomary for every Individual to continue in
 “ the constant Possession of his own Cell, they
 “ never charge themselves with unnecessary Ex-
 “ pences for any accidental Guests.

“ There are some Beavers called *Terours*,
 “ who make their abode in Caverns dug in a
 “ rising Ground, either on the Shore or at some
 “ distance from the Water, to which they scoop
 “ out subterranean Trenches from their Ca-
 “ verns, which descend from ten to an hun-
 “ dred Feet in depth. These Trenches furnish
 “ them with retreats situated at unequal heights,
 “ and wherein they enjoy a shelter from the
 “ Water when it ascends. Their Beds are
 “ made of Chips, which serve them instead of
 “ a Quilt ; and of Grass, which accommodates
 “ them in the nature of a Feather-Bed.

“ All these Works, especially in the cold Re-
 “ gions, are completed in *August* or *Septem-*
 “ *ber* ; after which Period, they furnish them-
 “ selves with Provisions. During the Summer
 “ Season they regale themselves with all the
 “ Fruits and Plants the Country produces. In
 “ the Winter they eat the Wood of the Ash,
 “ the

“ the Plane, and other Trees, which they steep
 “ in Water, in Quantities proportionable to
 “ their necessary Consumption ; and they are
 “ supplied with a double Stomach, to facilitate
 “ the Digestion of such a solid Food at two
 “ Operations. They cut Twigs from three to
 “ six Feet in length ; the large ones are con-
 “ veyed by several Beavers to the Magazine,
 “ and the smaller by a single Animal : but they
 “ take different ways, each Individual has his
 “ Walk assigned him, to prevent the Labourers
 “ from being interrupted by their mutual Oc-
 “ casions. The Dimensions of their Pile of
 “ Timber are regulated in proportion to the
 “ number of the Inhabitants ; and it has been
 “ observed, that the Provision of Wood for
 “ ten Beavers, comprehended thirty Feet. in a
 “ square Surface, and ten in thickness. These
 “ Parcels of Wood are not piled up in one con-
 “ tinued Heap, but laid cross one another, with
 “ Interstices between them, that they may the
 “ better draw out what Quantity they want,
 “ and always take the Parcel at the bottom,
 “ which lies in the Water : they cut this Wood
 “ into small Particles, and convey it to their
 “ Cells, where the whole Family come to re-
 “ ceive their particular Share. Sometimes they
 “ expatiate in the Woods, and regale their
 “ young with a new Collation. The Hunters,
 “ who are sensible that these Creatures love
 “ green Wood better than old, place a Parcel
 “ of the former about their Lodge, and then
 “ have several Devices to ensnare them. When

“ the Winter grows severe they sometimes break
 “ the Ice, and when the Beavers come to the
 “ opening for the Benefit of the Air, they kill
 “ them with Hatchets, or make a large Aperture
 “ in the Ice, and cover it with a very strong Net,
 “ and then overturn the Lodge; upon which the
 “ Beavers, who think to escape in their usual way
 “ by flying to the Water, and emerging at the Hole
 “ in the Ice, fall into the Snare, and are taken.”

Among the Birds let us take a View of the
 different Tribes of those which are particularly
 called Birds of Passage, who pass in great Bo-
 dies or Flocks from one Climate to another;
 some seeking for a cold, others a hot, others a
 temperate Region: such particularly as Quails,
 Swallows, Wild-Ducks, Plovers, Woodcocks,
 and Cranes*. In the Spring, the Quails pass
 from *Africa* into *Europe*, to find a more tole-
 rable and moderate Summer than they could
 enjoy in the Country from whence they came.
 Toward the close of Autumn, they return over
 the Mediterranean to obtain in *Barbary* and
Egypt a gentle heat, correspondent to the Cli-
 mates they abandoned, when the Sun was on
 the other side of the Equator. They take their
 flight in Troops, that sometimes resemble Clouds;
 they frequently cover Ships, and the Sailors take
 them without difficulty.

As for the Swallows, it was usually thought
 that they crossed the Seas at the different Seasons
 of the Year, but it is much more probable
 that in these *Northern* Countries, they conceal
 themselves

* Spectacle de la Nature, *Dial.* 11. p. 48, 49, 50.

themselves in the Caverns of the Earth, riveted to one another with their Claws and Bills. They flock to Places unfrequented by Men, or even bury themselves in the Water ; the Precaution they take to lubricate their Feathers with their own Oil, and to roll themselves up like a Ball, preserves them in the Water, and even under the Ice. They are there benumbed, and pass the whole Winter without Motion. The Heart however has a constant palpitation, and the Warmth revives them at the return of the Spring ; they then revisit their former Habitations, and each Individual finds out his own Country, and even his particular City, Village, and Nest.

As to Wild-Ducks and Cranes, both the one and the other, at the approach of Winter, fly in quest of more favourable Climates : They all assemble at a certain Day, like Swallows and Quails, they decamp at the same time, and 'tis very agreeable to observe their Flight ; they generally range themselves in a long Column like an I, or in two Lines united like a V reversed. The Duck or Crane who forms the Point, cuts the Air and facilitates a Passage to those that follow ; but he is charged with this Commission, only for a certain time, at the conclusion of which, he wheels about into the Rear, and another takes his Post. It is very common, but yet a very surprizing Observation, to see how regularly the Swallows meet upon a certain Day, in order to depart all together, and every Circumstance of their Journey has something in it almost miraculous in their Progress over Seas and
and

and Kingdoms, one knows not which to admire most, the force that sustains them in so long a Passage, or the order in which the whole is accomplished. Who acquainted their Young, that it would soon be necessary for them to forsake the Land of their Nativity, and travel into a strange Country? Why do those who are detained in a Cage, express so much Disquietude at the Season for the usual Departure, and seem to be Afflicted at their Inability to join the Company? What particular Bird charges himself with the Care of assembling a Council, to fix the Day of their Removal? Who sounds the Trumpet to inform the Tribe of the Resolution taken, that each Party may be prepared? Whence have they their Almanack to instruct them in the Season and Day when they are to be in motion? Are they provided with Magistrates and Officers to preserve the Discipline which is so extraordinary among them? For not one of them dislodges till the Proclamation has been publish'd, and not a Defterter is seen on the Day that succeeds their Departure. Have they Charts to regulate their Voyage by? Are they acquainted with the Islands where they may rest, and be accommodated with Refreshments? Are they furnished with a Compass to guide them infallibly to the Coast they would steer to, without being disconcerted in their Flight by Rains or Winds, or the dismal Obscurity of many Nights? or are they endued with a *Reason superiour to that of Man*, who has not Courage to attempt such a Passage,

without a Multitude of Machines, Precautions, and Provisions? Where would be the Danger or Absurdity of ascribing all this to *Reason*? *A Reason* limited and circumscribed within the narrow Bounds of their own Sphere. *A Reason* sufficient to direct them to the Means of preserving and increasing their several Families, and answering the several Ends of their Being, and the Purposes of their Creation. *A Reason not superiour to that of Man*, because the *Reason of Man* is vast and comprehensive, taking in the whole Compass of Nature, looking forwards and backwards into Eternity; whereas the Sphere of Action allotted to Brutes, is contracted into a very narrow Compass, and confined to a few Articles of Life and Action; in which too, perhaps, the exquisite Structure of their Organs, and the Tenuity and Purity of their Juices and animal Spirits, not corrupted, or impaired by Luxury, and Intemperance, may, possibly, give them a considerable Advantage over the greater part of the Human Species. But more of this in its proper Place.

Let us next descend to the various Tribes of Insects, which, tho' vile and contemptible in their Appearance, yet each of them in their several Ranks and Stations proclaim aloud the infinite Wisdom and Power of their Creator. Their Variety, their Dispositions, their Sagacity, their Policy, their Industry, the wonderful Proportion of their Organs, the Delicacy of their Structure, and a thousand other Curiosities observable in every Species, are matter of infinite Delight.

Delight and Pleasure to a curious and inquisitive Genius ; but were we able to examine them in a nearer View, could we be capable of knowing the direct Purposes of infinite Wisdom in their Creation, the Relation they bear, and the harmonious Proportion they stand in to the universal System, it would afford us infinite matter of Astonishment and Surprise, as well as of religious Reverence and Adoration to their Omnipotent Creator. Small and contemptible as they appear to us, they are really formed with the most exquisite Symmetry, the most delicate Proportion. ;Vulgar Prejudice may consider them as the Effect of Chance, and the Refuse of Nature ; but an attentive Eye, assisted by the help of Microscopes, discovers in them astonishing Marks of infinite Wisdom, which, far from neglecting them, has been particularly careful to cloath, arm, and accommodate them with all the Instruments and Faculties necessary to their Condition. This it is * that has arrayed them, even to a degree of Complaisance, by laying out such a Profusion of azure, green, and vermillion, Gold, Silver, and Diamonds, Fringe, and Plumage, upon their Robes, their Wings, and the Ornaments of their Heads. We need only behold the Ichneumon, *Spanish* Dragon, and Butterfly, nay, a Caterpillar itself, to astonish us with this Magnificence. The same infinite Wisdom, which has been so liberal in their Ornaments, has completely armed them for making War, and assaulting their Enemies,

* Spectacle de la Nature. *Dial.* i. p. 7, 8.

as well as defending themselves. The generality of them are provided with strong Teeth, a double Saw, a Sting with two Darts, or vigorous Claws, and a scaly Coat of Mail, for the Defence of their whole Body. The Safety of the greatest part of them consists in the Agility of their Flight, by which they easily avoid the Danger that threatens them : Some by the Assistance of their Wings, others by a Thread that supports them, when from the Leaves on which they live, they throw themselves at a distance from their Enemy ; and others by the Spring of their Hind-feet, whose Elasticity immediately launches them out of the reach of Danger, and when they are destitute of Force, Stratagem, and Cunning, supply the want of the common and ordinary Means of their Preservation.

This is very wonderful ; but our Wonder increases, when we attentively consider the different Organs and Implements with which each of them work in their several Professions : Some spin, and have a couple of Distaffs, and Fingers to form their Thread ; others make Nets and Lawn, and for that purpose are provided with Shuttles, and Clues of Thread. There are some who build in Wood, and are therefore supplied with two Bills for cutting their Timber. Others make Wax, and have their Shops furnish'd with Rakers, Ladles, and Trowels. Most of them have a Trunk, more wonderful for its various Uses than the Elephant's, and which to some serves for an Alembic for the distillation

distillation of a Syrup Man can never imitate ; to others it performs the Office of a Tongue ; many employ it as a Drill for piercing, and the generality of them use it as a Reed for Suction. Several, whose Heads are fortified with a Trunk, a Saw, or a couple of Pincers, carry in the other extremity of their Bodies an Augur, which they lengthen and turn at discretion ; and by that means dig commodious Habitations for their Families in the Heart of Fruits, under the Bark of Trees, in the Substance of Leaves or Gems, and frequently in the hardest Wood itself. There are few who have excellent Eyes, but have likewise an additional Benefit of a couple of Horns, or *Antennæ*, that defend them ; and as the Animal moves along, especially in the dark, make a tryal of the Way, and discover by a quick and delicate Sensation, what would defile, drown, or endanger them ; and if they find these Horns moistened by any offensive Liquor, or bend by the Resistance of a solid Body, the Animal is warned of the Danger, and turns another way. Now all these Motions, even of the minutest Animals, however accidental or capricious they may appear to us, are as really directed to a certain End, as those of the largest Beings : we shall find all the Sagacity and Cunning we admire in a Fox, for chusing himself an advantageous Kennel, providing for himself and his Family the Necessaries of Life, and avoiding the Snare of the Gin, and the Persecution of the Hunter : The same Industry with which we see a Bird build itself a convenient Nest, provide

vide for the Subsistence of itself and Young-ones, and elude the Snares of the Fowler; you will find the same Care, the same Sagacity, actuating the smallest Insect for the Preservation of itself and its minute Posterity. The Parent is seldom, or never, deceived in the natural Choice of Means for its own Preservation, or the Security and Education of its Young-ones. Dissolve a Grain of Pepper in Water, you may discover by the help of a Microscope, Worms of an incredible Smallness, swimming in the Fluid. The Parent, who knows this to be their proper Nourishment, never lays her Eggs in any other Place. Look through a Microscope at a Drop of Vinegar, there you will discover a number of little Eels, and never any other Animals, because one particular Creature knows, that Vinegar, or the Materials that compound it, is proper for her Family, and therefore deposits them either in that Matter, or in the Liquor itself, and no where else. † In those Countries where the Silk-worm feeds at large in the Fields, her Eggs are only to be found on the Mulberry-tree: 'tis easy to see what Interest determines her to that Choice. You will never find upon a Cabbage any Eggs of the Caterpillar that eats the Willow; nor see upon the Willow the Eggs of any Caterpillar who feeds upon Cabbage. The Moth seeks for Curtains, Woollen Stuff, dress'd Skins, or even Paper, because its Materials are Fragments of Cloth, which have lost the bitter Flavour of Hemp, by the work-

† Spectacle de la Nature. *Dist.* i. p. 19.

ing of the Paper-mill. In short, every Species of Animals, from Man the Lord of the Creation, to the minutest Insect that the naked Eye, or the Microscope can discover, act with Regularity and Uniformity, with all the Marks of Wisdom, Sagacity, and Prudence, within their several Spheres of Action, for the Preservation of their Being, the Propagation of their Species, and answering the several Ends and Purposes of Providence in their Creation, and the Rank which they hold in the System of Nature.—But what am I doing! —Pardon me, Madam, my Pursuit of this copious and delightful Inquiry, has led me off from the main Question I proposed to consider, which was, the Necessity of some Language, some Means of communicating the Sentiments, Wants, Inclinations, and Desires of the Individuals of every Society and Family, in order to consult and provide for the Safety and Happiness of the whole. The mutual Wants of Society, the Care and Education of a Family, must be in some sense, and to a certain degree, the same in all Societies and Families of Birds and Beasts, Reptiles and Insects, as well as of Men; and without some kind of Language, some Method of Communication, those Wants could never be known, nor those Necessities effectually supplied. All Creatures, therefore, that live in society, who divide the several Duties and Offices of that Society among the Individuals, who appoint to every Member their distinct Offices, their peculiar Posts, their particular Provinces, must of necessity have some Language,

guage, be it what it will, since, without this Help it is quite impossible for any Society to subsist. Now, tho' all Animals do not incorporate in large Societies, yet all have Families, domestic Engagements, Cares, and Necessities, which require mutual Help and Assistance, and by consequence a certain Language, by which their mutual Wants, Inclinations, and Necessities may be discovered and made known to each other ; so that every Species of Animals seem to have the same want of a Language, of some kind or another, as those which live in great Societies : for as all Societies are but Associations of Families or Individuals, whatever infers the Necessity of a Language in one case, infers it equally in all.

It would be hard to assign a Reason why Nature, or rather the all-wise Author of Nature, who always acts uniformly, should deny some of them a Privilege he has granted to the rest. It is a general Observation that all the Productions of Nature are uniform, that as she is sparing in Superfluities, so she is rather profuse in things necessary, and upon the whole does nothing in vain : but is it not necessary that a Couple of Animals, joined to form a Household and Family together, a Couple of Birds for instance, should be able to understand, and mutually to impart their Sentiments and Thoughts to each other ? Let us return to the old Supposition of two People absolutely dumb, living together in the same House, without the Assistance of any other Person ; I defy the Union to subsist, if they have no means left of agreeing about their
Affairs,

Affairs, and expressing their mutual Wants and Necessities. Two Sparrows, two Foxes, two Whales, will lie under the same Impossibility of living together; and all the Inconveniencies of the dumb Society I have mentioned, will be seen in their respective Families: In a word, the Necessity of a Language between a Husband and his Wife, to enable them to live together, upon which human Societies subsist, is, in due degree, the same in all the Species of Beings below them, in every Tribe and Family of the Brute-Creation.* Could it be supposed, that there were any Race of Animals in the Universe capable of producing their Kind in absolute Solitude, without the Intervention of a different Sex, it must be confessed the Faculty of Speech to them would be quite a useless Talent: but wherever two Beasts, or two Birds, shall stand in an habitual Need of each other, and form among them a lasting Society, they must of necessity speak to each other. How is it to be conceived, that in the Gallantry of their first Addresses to each other, their mutual Concern and Vigilance for each other's Welfare, and the necessary Cares that attend the Education of their Families, they should not have a thousand things to say to each other? It is impossible in the order of Nature, that a Sparrow, or a Turtle, that is fond of his Mate, should be at a loss for proper Expressions to discover the Tendernefs, the Jealousy, the Anger, the Fears he entertains for her, in the several In-

* Philosoph. Amusement, p. 36, 37, &c.

cidents of Life that must arise betwixt the most loving Couple, in the course of a long Cohabitation. He must scold her when she plays the Coquet, he must bully the Sparks that make Attempts upon her Virtue, he must be able to understand her when she calls to him ; he must, whilst she is assiduously sitting upon her Brood, be able to provide Necessaries for her, and know distinctly what it is she wants or calls for, whether it be something to eat, or Materials to repair her Nest ; in all which, a Language, of some sort or other, is absolutely necessary.

Our Author reasons so pertinently and consistently upon this Head, that I shall chuse to give you the two or three following Paragraphs in his own Language.

“ Many Beasts, one will say, have not a settled and permanent Household like Birds, (for by-the-bye, Birds are the most perfect Model of conjugal Constancy and Fidelity :) this I very well know, and their Number is even very great. Such are Dogs, Horses, Deer, and almost all Quadrupeds, Fishes, and Reptiles. But I shall always insist upon a Principle, granted and acknowledged as certain ; Nature is too much like herself in Productions of one and the same Genus, as to have put between Beasts so essential a Difference, as that of Speaking, or not Speaking at all, would be. Upon this Principle it is, that though we hardly know the Seeds of Coral, of Mushrooms, of Truffles, or Fern, we are nevertheless

“ nevertheless persuaded that these Plants pro-
 “ ceed from Seeds, because it is the manner
 “ in which Nature produces all the rest. Let
 “ us then conclude, that if Nature has given
 “ to Beasts (or Animals) living in Society, and
 “ in a Family, the Faculty of Speaking ; she
 “ has doubtless bestowed the same Advantage
 “ on all the rest. For, we are not now upon
 “ those accidental Differences which Nature
 “ loves to diversify in the different Species of
 “ the same Genus : there are not, perhaps, in
 “ the whole World two Faces perfectly alike ;
 “ but yet all Men have a Face. There are
 “ among the several Species of Animals Diffe-
 “ rences still greater : some have Wings, others
 “ have Fins, some Feet and Legs ; the Serpents
 “ have none of these : but all Animals have
 “ the Faculty of moving and transporting them-
 “ selves wherever they please, according to
 “ their Wants. Among Animals there are some
 “ that see and hear more or less perfectly ; but
 “ yet they all hear and see. It is the same thing
 “ with the Faculty of Speech : this Faculty,
 “ perhaps, is more perfect in the Beasts which
 “ live in Societies and form Families ; but it
 “ being in some, we must believe it to be in
 “ all of them, but more or less perfect, accord-
 “ ing to their respective Wants.

“ It is even observable, that the Animals
 “ who live neither in Society, nor in a settled
 “ Family, yet have in each Species a sort of
 “ Commerce or Society among themselves.
 “ Such are the Quadrupeds, the Fishes, the
 “ Reptiles,

“ Reptiles, the Birds themselves independently
 “ of their Household, as Starlings, Partridges,
 “ Ravens, Ducks, and Hens. Now what Ad-
 “ vantage could these Creatures have by endea-
 “ vouring to live in Society one with another;
 “ if they did it not for mutual Assistance, and
 “ reciprocally to have the Benefit of their Know-
 “ ledge, Discoveries, and of all the Helps they
 “ can afford each other ; and how could they do
 “ so, if they do not understand one another ?
 “ All the Arguments I have already used to
 “ prove, that the Creatures which live in So-
 “ ciety must have a Language, here again find
 “ their Place and their whole Energy. All the
 “ Difference must be only in the Degrees of
 “ *Plus* and *Minus*; and if we judge of this only
 “ by Matters of Facts, perhaps there is no dif-
 “ ference at all.

“ The Wolves, for instance, hunt with great
 “ Skill, and together contrive warlike Strata-
 “ gems. A Man crossing a Frith, saw a Wolf
 “ who seemed to be watching a Flock of Sheep.
 “ He informed the Shepherd of it, and advised
 “ him to cause the Animal to be pursued by
 “ his Dog : I shan’t be such a Fool, replied the
 “ Shepherd ; the Wolf yonder is there only to
 “ divert my Attention, and another Wolf who
 “ is working on the other side, only watches
 “ the Moment when I shall set my Dogs upon
 “ this to snatch one of my Sheep from me.
 “ The Man who was passing by, willing to
 “ be satisfied of the Fact, promised to pay for
 “ the Sheep ; and the thing happened, just as
 “ the

“ the Shepherd said it would. Does not a Stra-
 “ tagem so well concerted evidently suppose
 “ that the two Wolves had agreed together,
 “ one to shew, and the other to hide himself?
 “ Now how is it possible to agree in this man-
 “ ner without the help of Speech ?

“ A Sparrow finding a Nest that a Martin
 “ had just built, standing very convenient for
 “ him, posselt himself of it. The Martin
 “ seeing the Usurper in her House, call'd for
 “ help to expel him. A thousand Martins came
 “ full speed and attacked the Sparrow : but the
 “ latter being covered on every side, and pre-
 “ senting only his large Beak at the Entrance
 “ of the Nest, was invulnerable, and made the
 “ boldest of them, who durst approach him,
 “ to repent their temerity. After a Quarter
 “ of an Hour's Combat, all the Martins dis-
 “ appeared. The Sparrow thought he had
 “ got the better, and the Spectators judg'd
 “ that the Martins had abandoned their Un-
 “ dertaking. Not in the least. Immediately
 “ we saw them return to the Charge ; and
 “ each of them having procured a little of that
 “ temper'd Earth, with which they make their
 “ Nests, they all at once fell upon the Spar-
 “ row, and inclosed him in the Nest to perish
 “ there, tho' they could not drive him thence.
 “ Can you imagine, Madam, that the Martins
 “ could have been able to hatch and concert
 “ this Design all of them together, without speak-
 “ ing to each other ?

“ Wonders

“ Wonders are recounted by Travellers of
 “ the Monkeys, when they go a plundering;
 “ a Troop of Soldiers when they go a For-
 “ raging, cannot march in greater Order, or
 “ with more Precaution. I could mention, and
 “ you can easily recollect a thousand other In-
 “ stances of the same Nature ; but this would
 “ require a Volume, and I aim only at support-
 “ ing my Argument. Men hitherto have al-
 “ ways made use of these Instances to prove
 “ that Beasts have a knowing Faculty ; and they
 “ have been in the right so to do, because it
 “ is really inconceivable, that Beasts can do such
 “ singular Actions without Knowledge, but we
 “ have not sufficiently examined into the Me-
 “ rits and Bottom of this Question ; for if it be
 “ absolutely impossible for Beasts to perform
 “ these Actions without speaking, we are more-
 “ over obliged to conclude, that they have a
 “ Faculty of speaking to each other. Now,
 “ Madam, I would beg of you here to ob-
 “ serve, that this is not an Opinion or a System
 “ founded upon meer Conjecture or probable
 “ Explications, but an Argument supported by
 “ sensible and palpable Facts ; I say sensible Mat-
 “ ters of Fact, such as these I have just been
 “ alledging, and a thousand others of every
 “ Kind. Enter into a Wood where there are
 “ a Parcel of Jays, the first then that sees you
 “ gives the Alarm to the whole Troop. Mag-
 “ pyes, Blackbirds, and almost all the Feather-
 “ ed Kind do the same. Let a Cat but show
 “ herself upon the top of a House, or in a Gar-
 “ den,

“ den, the very first Sparrow that perceives her,
 “ exactly does what a Centinel does among us,
 “ when he perceives an Enemy ; he by his
 “ Cries warns all his Companions, and seems
 “ to imitate the Noise of a Drum beating a
 “ March. See a Cock near his Hen, a Dove
 “ near the Female he is courting, a Cat fol-
 “ lowing his Mate, there is no end of their
 “ Discourses, till there is an end of their Court-
 “ ship. But there is one important Reflection
 “ yet behind, which in my Opinion is little
 “ less than Demonstration. We every day
 “ speak to Beasts, and they understand us very
 “ well. The Shepherd makes himself under-
 “ stood by his Sheep, but particularly by his
 “ Dog that attends him. The Cows under-
 “ stand all the Milkmaid says to them. Many
 “ a profound Conversation passes between the
 “ Sportsman and his Dogs ; the Groom and his
 “ Horses ; the Lady and her Parrot ; Miss and
 “ her Cat ; we speak to them all, and they
 “ understand us ; they in their turn speak to
 “ us, and we understand them. How much more
 “ probable is it, that they speak to and understand
 “ each other ! for with regard to them, we can
 “ speak no other than a foreign Language ; and
 “ if Nature has enabled them to speak a foreign
 “ Language, how can she have refused them the
 “ Faculty of speaking and understanding a Na-
 “ tural one ? This can hardly be conceived.

“ But though we should allow Understand-
 “ ing and Language to the several Species of
 “ Beasts, Birds, and Insects ; What shall we do
 “ with

“ with the Fishes and Reptiles ; What can we
 “ say for them? Has Nature been as boun-
 “ tiful to them as to the rest, must we al-
 “ low them to have Speech and Understand-
 “ ing? Can they understand and converse with
 “ each other? Can we imagine a Conversation
 “ betwixt two Fishes, two Ants, or two
 “ Worms? The Birds indeed sing, the Dogs
 “ bark, the Wolves howl, Sheep bleat, Lions
 “ roar, Oxen low, Horses neigh ; this every
 “ body hears and knows : but who ever heard
 “ the Language of a Fish, or the Conversa-
 “ tions of Worms and Caterpillars? What-
 “ ever Difficulty there may be in hearing or
 “ explaining their Language, I think there can
 “ be but little in apprehending they have one,
 “ upon the same general Principles laid down
 “ before ; and since there is a strong Presump-
 “ tion that all other Species have it, as arising
 “ from the Necessity of their Nature; the Pre-
 “ sumption seems equally strong for them as
 “ for the rest. But the Difficulty lies in be-
 “ ing able to know and distinguish it, part
 “ of them live in an Element forbidden to
 “ us, and many of the others escape our Sight
 “ by their smallness. But how do we know
 “ that Fishes have not as many and perhaps
 “ more vocal Expressions than the Birds them-
 “ selves? They all of them seem to be form-
 “ ed upon the same Model? Some fly, others
 “ swim ; but flying and swimming are one
 “ and the same Motion, the Difference is only
 “ in the Element. We are told in the Book

“ of

“ of *Genesis*, ch. i. v. 20. that God created at
 “ the same time both Fishes and Fowls from
 “ the Bosom of the Waters. Fishes have five
 “ Senses as well as Birds and other Animals,
 “ and why should they not have the Faculty
 “ of Speaking as well as the rest? It is true,
 “ we cannot hear them speak or sing, but it
 “ is perhaps for want of proper Organs to hear
 “ them. The Water is thoroughly penetrated
 “ with Air which the Fishes breathe, Why may
 “ they not with that Air, and by means of
 “ a Spring equivalent to the Tongue and Throat,
 “ form Vibrations and Sounds too nice and de-
 “ licate for our Ears, but which are easily heard
 “ and understood by their own Species? The
 “ Ear of Man is extremely coarse, which is
 “ the result of a necessary Providence; for were
 “ our Ears sensible of the minutest Vibrations
 “ of the Air we live in, we should be for
 “ ever stunned with a thousand confused Noises,
 “ which would never permit us to distinguish
 “ any one of them. There are then certainly
 “ in the Air many Sounds which we do not
 “ hear; such as, for instance, the Noise of a
 “ Silk-Worm gnawing a Mulberry Leaf; if he
 “ is alone, or there are but few of them to-
 “ gether, no body can hear them: but put a
 “ a certain Number of them in a Cabinet, and
 “ then all those little Noises joined in unison,
 “ become mighty sensible to our Ears. How
 “ much more is it possible, that there may be
 “ in the Water Noises insensible to us, and that
 “ Fishes may by that means speak, without
 H being

“ being audible to us : at least I delight in
 “ thinking so, not to rob any part of the Cre-
 “ ation of those Perfections which Nature uses
 “ to bestow on all : nor could I think, with-
 “ out a kind of philosophical Melancholy,
 “ that she had doomed to eternal Silence, in-
 “ numerable Nations, which inhabit the Im-
 “ mensity of the Seas and Rivers. Silence is
 “ the Portion of the Dead ; Speaking enlivens
 “ the Living themselves. You may laugh, and
 “ be as merry as you please upon my speak-
 “ ing Fish, as doubtless he was laughed at that
 “ first mentioned a flying Fish, and yet the
 “ one may chance to prove as true as the
 “ other.

“ The Reptiles and Insects are just in the
 “ same Case. There are many kinds of Rep-
 “ tiles which have very distinct vocal Ex-
 “ pressions ; such as Serpents, Frogs, and Toads :
 “ and consequently, arguing upon the Principle
 “ of the Uniformity of Nature, we are inti-
 “ tled to suppose an Equivalent in the rest ;
 “ not to mention supplemental Miens, Looks,
 “ and Gestures. It is not quite so with the
 “ Insects : there is no Species of them, that we
 “ know of, that has vocal Expression, pro-
 “ perly so called : The Cry of the Cricket, the
 “ singing or chirping of the Grasshopper, the
 “ Noise of certain Butterflies, and the hum-
 “ ming of Flies, are not properly vocal Sounds,
 “ but Noises caused by the trembling of a
 “ Membrane. But what of all that ? It can-
 “ not be doubted, but that the Cry of the
 “ Cricket

“ Cricket and Grasshopper, serves them to call
 “ each other in order to meet, and, very like-
 “ ly, to converse. It may be thought that the
 “ humming of the Flies likewise serves them
 “ to know each other in every Society, either
 “ by the Uniformity or Unison of the Tone,
 “ or imperceptible Differences not within our
 “ reach, which may be equivalent to vocal Ex-
 “ pressions, and is at the same time a Proof, how
 “ Nature, always uniform as to what is gene-
 “ ral and essential, is, at the same time, ingeni-
 “ ous in varying the Means and Particulars of
 “ of her own Productions. Now, what Nature
 “ has done for some Insects, she has certainly
 “ done for all.

“ There is, for instance, a particular Sort of
 “ Spiders, which have a very singular Method
 “ of testifying to each other their Desire of
 “ being together. The Spider that wants Com-
 “ pany, strikes, with I know not what Instru-
 “ ment, against the Wall or Wood where she
 “ has settled, nine or ten gentle Blows, nearly
 “ like the Vibrations of a Watch, (which there-
 “ fore the Ignorant and Superstitious call a Death-
 “ watch) but a little louder and quicker ; after
 “ which she stays for an Answer : if she hears
 “ none, she repeats the same by Intervals for
 “ about an Hour or two, resuming this Exer-
 “ cise, and resting alternately Night and Day.
 “ After two or three Days, if she hears no-
 “ thing, she changes her Habitation, till she
 “ finds one that answers her. It is another Spie-
 “ der that answers her exactly in the same man-

“ ner, and, as it were, by Echo. If the lat-
 “ ter likes the Proposal, the Conversation grows
 “ brisker, and the beating becomes more fre-
 “ quent. Give attention to it, and you will
 “ find by the Noise that they gradually ap-
 “ proach each other, and that the Beatings
 “ come at last so close, that they are confound-
 “ ed, after which you hear no more Noise ;
 “ very likely the rest of the Conversation is
 “ whisper’d. I have oftentimes amused my-
 “ self in making the Echo of a Spider,
 “ which I have heard beating, and whose
 “ Noise I imitated, and she answered me punc-
 “ tually ; she sometimes even attacked me, and
 “ began the Conversation : I have often given
 “ that Diversion to several People, and made
 “ them believe it was a familiar Spirit.

“ How many like Discoveries might we make
 “ upon Insects, if our Organs were delicate
 “ enough to see and perceive their Airs and
 “ Motions, to hear their Voices, or what Nature
 “ has allotted them instead of Voices, I make
 “ no doubt, but we should find in Ants, Bees,
 “ Worms, Scarabæus’s, Caterpillars, Palmer-
 “ worms, Mites, and all the Insects, a Language
 “ designed for their Preservation, and the sup-
 “ ply of their Wants. And as there are certain
 “ Species of Insects, in which we observe great-
 “ er Industry and Knowledge than in large Ani-
 “ mals, it is not improbable that they have like-
 “ wise a more perfect Language in proportion,
 “ always confined however to the Necessaries of
 “ Life.”

Thus

Thus far I have transcribed almost intirely from the ingenious Author, who upon this Head talks more like a Philosopher, than in any other part of his Work. But were we now to enter into a minute Examination of the various Labours, the indefatigable Application, the publick Spirit, the regular Policy, the exact Oeconomy of the several Families of Insects, Bees, Ants and Wasps in particular, of which you find most surprizing Accounts in *Spectacle de la Nature*, and other learned Writers, it would be very hard to account for them, any otherwise than by allowing some mutual Means of Communication betwixt the Individuals of each Society, which we may venture to call a Language, or something analogous to it; and why should we be afraid of allowing this, when we consider, that even the most inarticulate Sounds are a kind of Language to some part of the Creation or other; nay, I may venture to add, even to ourselves. Do not the Drum and Trumpet speak to the Soldier? Does not every musical Sound speak to some part of our Nature? How are we excited by some to martial Rage and Fury, soften'd by others into jovial Mirth and Pleasures and dissolute Luxury; and melted by others into the tenderest Sentiments of Pity and Compassion, and sometimes even into Tears? Nay, the most discordant and grating Sounds have a Power over us; they make disagreeable Impressions, and excite painful Sensations in us; they discompose and dissipate the Spirits, they seem to curdle the Blood, like Acids thrown into Milk,

Milk, they enfeeble the whole nervous System, they spread a Trembling through our Joints, and Paleness over our Faces, and make the stoutest Heart to tremble. Mr. *Collier*, has somewhere in his *Essays*, carried this Thought so far as to fancy, that such a Concert of discordant Sounds, or Anti-music, might be composed, as should sink the Spirits, shake the Nerves, curdle the Blood, and inspire Despair, Cowardice, and Consternation into all that hear it. *'Tis probable* (says he, Part II. page 24.) *that the roaring of Lions, the warbling of Cats and Screech-Owls, together with a Mixture of the howling of Dogs,* (to which I could add some other Sounds, which I tremble to think of) *judiciously imitated and compounded, might go a great way in this Invention :* And proposes it as a very useful Improvement for the military Service, to strike a Terror and Panic into an Enemy ; not considering, that the Performers in this infernal Concert, and their Friends about them, would be in more Danger than the Enemy, who would be further removed from the discordant Sounds, and consequently from the terrible Impression. — This by-the-bye. — But in general we may venture to affirm with the Apostle, *That amongst that almost infinite Variety of Sounds and Voices that are to be heard thro' the whole Creation, there is not so much as one without its Signification.* 1 Cor. xiv. 10.

Well! Madam, thus far, I think, our Author and we are pretty well agreed, that Brutes have *Understanding* to know and express their Wants,

Wants, and provide for their Necessities; and a *Language*, or something equivalent to it, to demand and give mutual Advice and Assistance. Here, I think, we must make a Stand, we can go no further : their *Language*, however known to them, is quite unknown to us ; but could we converse with them in their own *Language*, as our renown'd and ingenious Countryman Capt. *Lemuel Gulliver* did with the Nation of the *Houbynnims*, we might then perhaps have Reason to agree with him, that they think and act more rationally, have more Sense, more Honour, and more Virtue, are better Philosophers, and deeper Politicians, than some of the finest Folks in *Great Britain*.—The only Difference now between us is, how to account for these surprizing Faculties, that they are not the Effects of mere Matter and Motion ; that they vastly exceed all the Powers of Mechanism, he readily confesses, and so I think must you and I. But spiritual Powers and Faculties, without a spiritual Subject to which they belong, and in which they reside, is a shocking Absurdity. Well, and how does he get rid of this Difficulty ? You shall hear him, Madam, in his own Words, Page 10. *Reason* (says he) *naturally inclines us to believe that Beasts have a spiritual Soul ; and the only thing that opposes this Sentiment, is the Consequences that might be inferred from it. If Brutes have a Soul, that Soul must be either Matter or Spirit, it must be one of the two ; and yet you dare affirm neither. You dare not say it is Matter, because*
you

you must then necessarily suppose Matter to be capable of Thinking; nor will you say that it is Spirit, this Opinion bringing with it Consequences contrary to the Principles of Religion; and this among others, that Men would differ from Beasts, only by the Degrees of Plus and Minus, which would demolish the very Foundations of all Religion. Therefore, if I can elude all these Consequences, if I can assign to Beasts a spiritual Soul, without striking at the Doctrines of Religion, it is evident that my System, being moreover the most agreeable to Reason, is the only warrantable Hypothesis. Now I shall, and can do it with the greatest Ease imaginable. I even have means, by the same Method, to explain many very obscure Passages in the Holy Scripture, and to resolve some very great Difficulties, which are not well confuted. This we shall unfold in a more particular Manner.

And, in good truth, Madam, you will find the Matter as particular as the Manner. An Hypothesis, so wild and unphilosophical, so contrary to Reason and Scripture, so shocking to common Sense, delivered with such an assuming Air, and such dogmatical Language, could surely proceed from nothing but an Excess of Vanity, or Contempt of his fine Lady's Understanding. But I shall detain you from it no longer, but give you as short and plain a View of it as I can; and, as near as possible, in his own Words.

Page 11. *Religion teaches us, that the Devils, from the very Moment they had sinned, were reprobate, and that they were doomed to burn for*

ever in Hell; but the Church has not as yet determined whether they do actually endure the Torments to which they are condemned: it may then be thought they do not yet suffer them, and that the Execution of the Verdict brought against them is reserved for the Day of the final Judgment — Page 13. Now what I pretend to infer from hence is, that till Doom's-day comes, God, in order not to suffer so many Legions of reprobate Spirits to be of no use, has distributed them thro' the several Spaces of the World, to serve the Designs of his Providence, and make his Omnipotence to appear. Some continuing in their natural State, busy themselves in tempting Men, in seducing and tormenting them, either immediately, as Job's Devil, and those that lay hold on human Bodies, or by the ministry of Sorcerers or Phantoms. These wicked Spirits are those whom the Scripture calls the Powers of Darkness, or the Powers of the Air. God, with the others, makes Millions of Beasts of all kinds, which serve for the several Uses of Man, which fill the Universe, and cause the Wisdom and Omnipotence of the Creator to be admired: By that means I can easily conceive how, on the one hand, the Devils can tempt us; and on the other, how Beasts can think, know, have Sentiments, and a spiritual Soul, without any way striking at the Doctrines of Religion. I am no longer surprized to see them have Dexterity, Forecast, Memory, and Judgment. I should rather have occasion to wonder at their having no more, since their Soul, very likely, is more perfect than ours: But I discover the Reason of this, it is because in Beasts as well as in

our selves, the Operations of the Mind are dependent on the material Organs of the Machine to which it is united; and these Organs being grosser and less perfect in Beasts than in us, it follows, that the Knowledge, the Thoughts, and the other spiritual Operations of Beasts, must of course be less perfect than ours: and if these proud Spirits know their own dismal State, what an Humiliation must it be to them, thus to see themselves reduced to the Condition of Beasts! But whether they know it or no, so shameful a Degradation is still with regard to them, that primary Effect of the divine Vengeance I just mention'd, it is an anticipated Hell. P. 17. Having mentioned the Prejudices against this Hypothesis, such as particularly the Pleasure which People of Sense and Religion take in Beasts and Birds, especially all sorts of Domestic Animals; he proceeds: Do we love Beasts for their own sakes? No. As they are altogether Strangers to human Society, they can have no other Appointment, but that of being useful and amusing. And what care we, whether it be a Devil, or any other Creature, that serves and amuses us? The thought of it, far from shocking, pleases me mightily. I with Gratitude admire the Goodness of the Creator, who gave me too many little Devils to serve and amuse me. If I am told, that these poor Devils are doomed to suffer eternal Tortures, I admire God's Decrees, but I have no manner of share in this dreadful Sentence; I leave the Execution of it to the Sovereign Judge, and notwithstanding this, I live with my little Devils, as I do with a Multitude

itude of People, of whom Religion informs me, that a great Number shall be damned. But the cure of a Prejudice is not to be effected in a Moment, it is done by Time and Reflection; give me leave then lightly to touch upon this Difficulty, in order to observe a very important Thing to you.

Persuaded as we are, that Beasts have Intelligence, have we not all of us a thousand times pitied them for the excessive Evils, which the majority of them are exposed to, and in reality suffer? How unbappy is the Condition of Horses, we are apt to say, seeing a Horse whom an unmerciful Carman is murdering with Blows! How miserable is a Dog whom they are breaking for Hunting! How dismal is the Fate of Beasts living in Woods, they are perpetually exposed to the Injuries of the Weather, always seized with Apprehensions of becoming the Prey of Hunters, or of some wilder Animal, for ever obliged, after long Fatigue, to look out for some poor insipid Food, often suffering cruel Hunger, and subject moreover to Illness and Death! If Men are subject to a multitude of Miseries that overwhelm them, Religion acquaints us with the reason of it, viz. their being born Sinners: but what Crimes can Beasts have committed, by Birth to be subject to Evils so very cruel? What are we then to think (p. 19.) of the horrible Excesses of Miseries undergone by Beasts: Miseries indeed, far greater than those of Men? This is in any other System an incomprehensible Mystery; whereas nothing is more easy to be conceived from the System I propose. The rebellious Spirits deserve a Punishment still more rigorous, and happy is it for
 I 2 them

them that their Punishment is deferred; in a word, God's Goodness is vindicated, Man himself is justified: for what Right can we have without Necessity, and often in the way of meer Diversion, to take away the Life of Millions of Beasts, if God had not authorized him so to do? And Beasts being as sensible as our selves of Pain and Death, how could a just and merciful God have given Man that Privilege, if they were not so many guilty Victims of the Divine Vengeance?

But hear still something more convincing, and of greater Consequence: Beasts, by Nature, are extremely Vicious. We know well that they never sin, because they are not free; but this is the only Condition wanting to make them Sinners. The Voracious Birds and Beasts of Prey are cruel: Many Insects of one and the same Species devour each other. Cats are perfidious and ungrateful, Monkeys are mischievous, Dogs are envious. All Beasts in general are jealous and revengeful to excess; not to mention many other Vices we observe in them; and at the same time that they are by Nature so very vicious, they have, say we, neither the liberty, nor any helps to resist the Byass that hurries them into so many bad Actions. They are, according to the Schools, necessitated to do Evil, to disconcert the general Order, to commit whatever is in Nature most contrary to the Notion we have of natural Justice, and to the Principles of Virtue. What Monsters are these, in a World originally created for Order and Justice to reign in? This is in good part what formerly persuaded the Manicheans, that there were of necessity two Orders of Things, one good,

good, and the other bad; and that Beasts were not the Work of the good Principle. *A monstrous Error!* But how then shall we believe that Beasts came out of the hands of their Creator with Qualities so very strange? If Man is so very wicked and corrupt, it is because he has himself through Sin perverted the happy Nature God had given him at his Formation. Of two things then we must say one: either that God has taken delight in making Beasts so vicious as they are, and of giving us in them Models of what is most shameful in the World; or that they have like Man Original Sin, which has perverted their primitive Nature.

The first of these Propositions finds very difficult access to the Mind, and is an express Contradiction to the Holy Scriptures, which say, that whatever came out of God's hands, at the time of the Creation of the World, was good, yea very good? What good can there be in a Monkey's being so very mischievous, a Dog so full of envy, a Cat so malicious? But then many Authors have pretended, that Beasts before Man's Fall were different from what they are now; and that it was in order to punish Man, that they are rendred so wicked: but this Opinion is a meer Supposition, of which there is not the least Footstep in Holy Scripture. It is a pitiful subterfuge to elude a real Difficulty; this at most might be said of the Beasts with whom Man has a sort of Correspondence, but not at all of the Birds, Fishes, and Insects, which have no manner of relation to him. We must then have recourse to the second Proposition, That the Nature of Beasts has, like that of Man,

Man,

Man, been corrupted by some original Sin : Another Hypothesis void of Foundation, and equally inconsistent with Reason and Religion, in all the Systems which have been hitherto espoused concerning the Soul of Beasts. What party are we to take ? Why, admit of my System and all is explained. The Souls of Beasts are refractory Spirits, which have made themselves guilty towards God. The Sin in Beasts is no original Sin, it is a personal Crime, which has corrupted and perverted their Nature in its whole Substance ; hence all the Vices and Corruption we observe in them, tho' they can be no longer criminal ; because God by irrecoverably reprobating them, has at the same time divested them of their Liberty.

You have here, Madam, a full View of our Author's Hypothesis, the rest being nothing but flourish and trifle, idle Answers to idle Objections, upon a Supposition that his Scheme is demonstrably certain. And is it not a choice one, to answer so many Purposes, and solve so many Difficulties in Philosophy and Scripture, and reconcile so many apparent Contradictions in Reason and Religion ! Does not your very Heart recoil at the monstrous Thought ? Can you view it in any Light without Abhorrence and Aver-
sion. It was a just Censure of a very great Man upon *Descartes's* Philosophy, that if he were at a loss for Reasons to oppose his Doctrine, that *Brutes were mere Machines*, this alone would be a sufficient Proof to himself, that it was *making a Jest of so great a part of the Creation* : but this Author has exceeded him with a Vengeance ! Instead of *making a Jest*, he has made them *De-
vils* ;

wils ; and in the Management of his Argument there is such a Confusion of Sentiments, such a Jumble of Light and Darkneſs, Truth and Error, Reaſon and Imagination, that one knows not where to begin, or in what Order to proceed, how to diſentangle Truth from Error, to ſeparate the Precious from the Vile, to diſtinguiſh the cool Dictates of Reaſon and Philoſophy, from the wild Flights of Imagination and Fancy. To follow him through all his Excursions, would be an endleſs and uſeleſs Undertaking. Our beſt and ſhorteſt way will be to examine the Goodneſs of the Foundation, and ſee whether there be any Ground in Scripture or Reaſon to ſupport ſo monſtrous a Superſtructure ; if not, it muſt fall to the ground, and leave room for a juſt and uniform Structure upon ſolid and laſting Foundations ; which, (if you approve of this) ſhall be the Subject of a ſecond Letter.

In the mean time, Madam, I aſſure myſelf, you will be in no pain about the Event. You are too well acquainted with the Language and Genius of that lively Nation, as not to know that they have Gaſconades in Philoſophy, as well as in Gallantry, Romance, and Politics : You are bleſſed with an Underſtanding too good to be impoſed upon by vain Pretences to Reaſon and Philoſophy ; you can eaſily diſtinguiſh betwixt empty Sounds, and ſolid Senſe ; betwixt the wanton Sallies of a luxuriant Fancy, and the ſevere Concluſions of Truth and Juſtice. You have a Firmneſs of Mind too great to be mov'd by the vain Terrors of a frightened Imagination, which are too often the Curſe of weak and little Minds. Continue, therefore,

fore, your wonted Care and Affection for your innocent Domesticks; they look up to you for their Support; from your Hand they receive the slender Provisions of Life, without murmuring or repining, which they endeavour to repay with the sincerest Gratitude, the most faithful Services, and unfeigned Affections that their Natures are capable of: If you are pleased, they rejoice with you; Do you careſs them? They are transported with Pleaſure. Do you frown? They tremble. Do you chide or puniſh them? They endeavour to appeaſe you by the moſt humble Proſtration and Submiſſion. Do not many of them diſcover more Gratitude, Sincerity, nay, I had almoſt ſaid Virtue, than many of their Maſters, who value themſelves upon the Refinements, upon their Reaſon, the Improvements of their Underſtandings, and nice Senſe of Honour? Are they wretched as well as we? Are they expoſed with us to the unavoidable Calamities of Life? They are not wretched through their own faults, they are not the Authors of their own Miſery; *they* (as well as we) *are made ſubject to Vanity, but they not willingly*, by a voluntary Abufe of their proper Faculties, but are by a Neceſſity of Nature involv'd in the Guilt and Condemnation of their rebellious, attainted, natural Lord and Sovereign. *Rom. viii. 20.*

If you are not diſpleaſed with the Subject, tired with the Length, or diſguſted with the manner of this tedious Epiſtle, I ſhall quickly do myſelf the Honour to ſend you ſome further Conſiderations upon the ſame Subject. I am, with great Reſpect, Madam,

Your moſt humble Servant.

